

ABSTRACT

A communication system comprises a central office (CO) of a communication service provider with xDSL modems within the CO, each modem being associated with a subscriber and comprises a plurality of subscriber premises (SPs), each equipped with one or more telephone devices connected to a telephone line of the SP and one or more devices connected to the telephone line by an HPN interface unit, which can send or receive data over communication lines. Each group of SPs is linked to a local communication box by twisted pairs of subscriber telephone lines. The local box comprises at least one subscriber converter associated with one SP linked to the box, the subscriber converter having a first terminal connected to said subscriber line and a second terminal connected to the subscriber-associated local wiring. The subscriber converter comprises an xDSL analog front end (AFE) module connected to said first terminal, an HPN AFE module connected to said second terminal, a digital xDSL-to-HPN converter module connected to the xDSL AFE and to the HPN AFE and comprises a splitter-isolator module connected to both the first and the second terminals permitting passage therethrough of low-frequency, plain old telephone service (POTS) related signals while not permitting passage therethrough of xDSL and HPN signals. Provided is also a subscriber converter for use in the above system.